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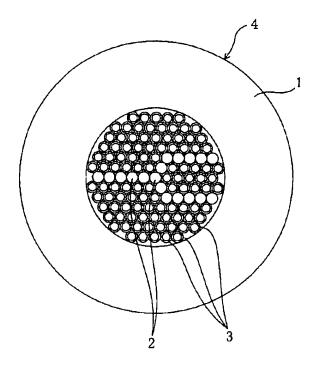
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TITLE

: METHOD FOR MANUFACTURING

PHOTONIC CRYSTAL WAVEGUIDE



ABSTRACT : PROBLEM TO BE SOLVED: To provide a method for manufacturing a photonic crystal waveguide which results in a low production cost and little variance in the characteristics of waveguides even when waveguides of a same structure are mass-produced.

> SOLUTION: A first solid rod material 2 and a second rod material 3 having an inner part and an outer part with different refractive indices are prepared in a plurality of pieces for each. The first rod material 2 and the second rod material 3 are bundled to produce a rod bundle 4 in such a manner that the end face of the bundle has a specified waveguide pattern formed by the first rod material 2 and has a specified grating pattern by the inner part of the second material 3. Then the rod material bundle 4 is heated and stretched to decrease the diameter to produce a fiber material. The fiber material is sliced into specified thickness to produce the photonic crystal waveguide.

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